

## **ARCHITECTURAL COMMENTS GLOSSARY**

Effective July 1, 1999

G = General

A = Architectural

D = Disability and Others

P = Plumbing

- G1) All comments made below refer to 1998 California Building Code (Part 2, Title 24, California Code of Regulations) unless noted otherwise.
- G2) The numbering of the following comments corresponds to the numbering used in the previous OSHPD review. Comments which no longer appear have been corrected. New comments, if any, are so indicated.
- G3) The following are the enforceable codes for facilities under the authority of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983:

(Note: Revisions to the previous Code Application Notice are shown underlined>

### **APPLICATION**

### **CODE**

All applications submitted  
on or after July 1, 1999

- |      |   |
|------|---|
| 1997 | UBC and 1998 California Amendments<br>(98 California Building Code, Part 2, Title 24,<br>CCR) Volumes 1, 2 and 2B |
| 1996 | NEC and 1998 California Amendments<br>(98 California Electrical Code - Part 3, Title 24,<br>CCR)                  |
| 1997 | UMC and 1998 California Amendments<br>(98 California Mechanical Code - Part 4, Title<br>24, CCR)                  |
| 1997 | UPC and 1998 California Amendments<br>(98 California Plumbing Code - Part 5, Title 24,<br>CCR)                    |
| 1997 | UFC and 1998 California Amendments<br>(98 California Fire Code - Part 9, Title 24, CCR)                           |

- G4) Effective January 1, 1991, California Law (Chapter 94, 1990 Statutes) requires that all licensed architects stamp and sign their plans, specifications, and other instruments of services. Therefore, please check that the documents have the imprint of the stamp and signature of the architect prior to this Office's stamping of the drawings.

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Stamp must include the architect's name, license number and renewal date.

- G5) For the purpose of providing access for the disabled, the Office of Statewide Health Planning and Development (OSHPD) recommends all Health Care Facilities and designers comply with the Americans with Disabilities Act (ADA), when more stringent than the California State Accessibility Standards (CCR, Title 24).

Questions regarding ADA should be addressed to

The Access Board  
1111 18th Street, N.W., Suite 501  
Washington, D.C. 20036  
1-800-872-2253

- G6) Due to the difficulty of anticipating every unsatisfactory condition that might exist in connection with the existing work where alteration or reconstruction work is proposed, the following clause or one of similar meaning shall be included in all specifications to which OSHPD gives approval in connection with either reconstruction or alteration work:

The intent of the drawings and specifications is to reconstruct the hospital building in accordance with Title 24, California Code of Regulations. Should any conditions develop not covered by the contract documents wherein the finished work will not comply with said Title 24, California Code of Regulations, a change order detailing and specifying the required work shall be submitted to and approved by OSHPD before proceeding with the work.

The above is required by Section 7-125(b)(2), Part 1, Title 24.

- G7) Provide written verification indicating conformance with local building ordinances for the following: environmental impact, use permits, local zoning, parking, landscaping, site grading, site drainage, and paving. See Article 1, Section 129680 of Health & Safety Code, Division 107.
- G8) The architect or engineer of record shall obtain written verification from the local building jurisdiction that:
- a. Site grading conforms to the local grading ordinances, and

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- b. Site drainage conforms to the local surface drainage requirements.

See Article 1, Section 129680 of Health & Safety Code.

- G9) Not Used.
- G10) Clarification should be provided regarding function and types of procedures performed in the room.
- G11) The boundary or the limits of each department should be identified for easy reference.
- G12) Services/systems and utilities that are necessary to the operation of the facility shall not originate or pass through a non-conforming building. See Section 420A.4.0, Title 24, CCR.
- G13) All drawings and specifications shall be prepared under the responsible charge, and signed by, the architect or structural engineer or both. The structural drawings and specifications shall be prepared and signed by the structural engineer. The responsibility for preparing and signing drawings and specifications for the mechanical and electrical portions may be delegated by the architect or structural engineer in general responsible charge, to a professional engineer registered in the appropriate branch of engineering, per Section 7-115, Part 1, Title 24.
- G14) Section 7-117, Chapter 7, Part 1, Title 24, requires submittal of geotechnic/geological reports, and final soil and foundation engineering reports.
- G15) Changes to the drawings and specifications, other than changes necessary for correction, made after submission for approval, shall be brought to the attention of the Office in writing or by submission of revised drawings identifying those changes, per Section 7-125 (d), Part 1, Title 24, CCR.
- A1) Treatment spaces. Radiology, laboratory, pharmacy, physical therapy and service spaces serving only outpatients and similar outpatient service departments shall not be located in nursing units, surgical units, perinatal units, nursery areas, central sterilization rooms, food-service areas, power plants, mechanical equipment rooms, maintenance shops, general storage, laundry, employees' dressing or housekeeping facilities, per Section 420A.4.2.

EXCEPTION: Physical and occupational therapy spaces of a rehabilitation service may serve both outpatients and inpatients.

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- A2) Waiting rooms for outpatients shall provide a seating area and space for wheelchairs and have public corridor access to, or provisions for, public toilet, drinking fountain and telephone, per Section 420A.4.4. NOTE: One waiting area may serve more than one department or service.
- A3) The minimum width of corridors shall be 8 feet (2438 mm), per Section 420A.5.1, and 5 feet (1524 mm) as permitted by Section 420A.5.2. See also exceptions to both sections.
- A4) Corridors for patient traffic in areas providing skilled nursing, intermediate care or rehabilitation services shall be furnished with a handrail on both sides at a height not less than 30 inches (762 mm) or greater than 36 inches (914 mm), per Section 420A.5.4.
- A5) Doors to toilet rooms shall have an opening of not less than 32 inches (813 mm) clear in width and shall be equipped with hardware which will permit the door to swing outward or in a manner to negate the need to push against a patient who may have collapsed within the toilet room, per Section 420A.6.1.

See Section 1007.5 for exit door width.

- A6) Rooms approved for the housing of patients shall be provided with natural light by means of exterior glazed openings excluding clerestory window, obscure glass and skylights, with an area not less than one tenth of the total floor area and natural ventilation by means of an exterior opening, per Section 420A.7.1.
- A7) Patient room window openings shall be operable and shall have sills not more than 36 inches (914 mm) above the floor. Where windows require the use of tools or keys for operation, the tools or keys shall be located at the nurses' station, per Section 420A.7.2.
- A8) Safety glass or plastic glazing materials shall be used in windows in psychiatric patient areas, per Section 420A.7.3.
- A9) Windows which may be frequently left in an open position shall be provided with insect screens of 16 meshes to the inch, per Section 420A.7.4.
- A10) All portions of a building used by patients, personnel or other persons shall be provided with artificial light and a mechanically operated ventilating system as specified in the California Electrical Code and the California Mechanical Code, per Section 420A.7.5.
- A11) Floor finishes shall be smooth, waterproof and durable, per Section 420A.9.1.1.

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- A12) Interior wall finishes shall be smooth, washable and durable per Section 420A.9.3.
- A13) Ceiling finishes shall be in compliance with Table No. 420A-A, per Section 420A.9.4.
- A14) Patient elevators shall have minimum inside platform dimensions of 5 feet by 8 feet (1524 mm by 2438 mm), and a minimum clear door opening of 3 feet 8 inches (1118 mm), per Section 420A.11.2.
- A15) Passenger elevators shall have minimum inside platform dimensions of 4 feet 8 inches by 7 feet 4 inches (1422 mm by 2236 mm), per Section 420A.11.3.
- A16) Rooms or screening enclosures shall be provided for the washing and cleaning of garbage containers and for the storage of garbage, trash and other solid wastes. Such rooms or screening enclosures shall include the following, per Section 420A.12.
1. A concrete floor with a curb and with a drain connected to the sewer.
  2. Steam or hot-water and cold-water supply.
  3. A minimum floor area of 2 square foot ( $0.046 \text{ m}^2$ ) per bed, but not less than 25 square feet ( $2.3 \text{ m}^2$ ), the least dimension of which shall be 4 feet (1219 mm).
  4. A method of limiting access to the material except by authorized persons.
- A17) Negative-pressure isolation rooms. Single rooms shall be provided for the isolation of patients with airborne communicable disease at a ratio of one room for each 35 beds, or major fraction thereof. At least one negative-pressure isolation room shall be provided. Negative-pressure isolation rooms shall be labeled with the words "Negative-Pressure Room" on or adjacent to the anteroom side of the door between the isolation room and the anteroom, per Section 420A.14.6.

EXCEPTION: 1. Acute psychiatric hospitals shall provide negative-pressure isolation rooms at the ratio of one room for each 50 beds, or major fraction thereof.

2. Negative-pressure isolation rooms are not required for chemical-dependency recovery services.

3. Alternate designs for modifications to isolation rooms in operation prior to the effective date of this section may be utilized when it can be demonstrated that the alternate

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design meets performance requirements, without compromising any health or life safety requirement.

- A18) Anteroom. A separate anteroom shall be provided between the negative-pressure isolation room and the corridor, which shall constitute the primary entrance to the negative-pressure isolation room. This anteroom shall have a handwashing fixture, work counter at least 3 feet (914 mm) long, cabinets and space to gown and to store clean and soiled materials. There shall be a view window from the anteroom to the isolation room and means to allow for airflow from the anteroom into the negative-pressure isolation room. Doors shall be aligned to allow large equipment to be wheeled into the negative-pressure isolation room unless a secondary door complying with Section 420A.14.6.2 is provided.

One anteroom may serve no more than two negative-pressure isolation rooms, per Section 420A.14.6.1.

- A19) Secondary entry. When a secondary entry is provided directly from the corridor to the negative-pressure isolation room, it shall meet the requirements of Section 1004.3.4.3.2.1. In addition, an approved gasket shall be installed to provide a seal at the bottom of the door. Secondary doors shall be provided with locking devices which are readily openable from the room side and which are readily operable by the facility staff on the other side. When key locks are used on isolation rooms, keys shall be located at the nurses' station in a prominent readily accessible location.
- A20) Adjoining toilet room. Each isolation room shall have its own adjoining toilet room with an emergency nurse call system, a lavatory, a shower providing a seat or a space for a shower chair and a toilet equipped with a bedpan flushing attachment with a vacuum breaker per Section 420A.14.6.3.
- A21) Each patient room shall be labeled with an identification number, letter, or combination of the two, per Section 420A.14.8.
- A22) A nurses' station shall be provided within each nursing unit, per Section 420A.14.9.
- A23) Nurses' stations shall be provided with a cabinet, a desk, space for records, a bulletin board, a telephone, and a specifically designated, lockable and illuminated medicine storage compartment, and a handwashing fixture. If a separate medicine room is provided, it shall have a lockable door and a sink. This sink cannot replace the required nurses' station handwashing fixture per Section 420A.14.9.1.

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- A24) Nurses' stations serving 25 or less beds shall have a minimum floor area of 100 square feet (9.3 m<sup>2</sup>). Nurses' stations servicing more than 25 beds shall have a minimum floor area of 125 square feet (11.6 m<sup>2</sup>). The minimum dimension of any nurses' station shall not be less than 8 feet (2438 mm) per Section 420A.14.9.2.
- A25) The distance between the nurses' station entrance and the center of the doorway of the most remote patient bedroom shall not exceed 90 linear feet (27 432 linear mm) per Section 420A.14.9.3.
- A26) Utility rooms shall be provided in each nursing unit. Clean utility rooms shall contain a work counter, handwashing fixture and storage facilities unless the room is used only for storage and holding as part of a system for distribution of clean and sterile supplies, in which case the work counter and handwashing fixture may be omitted. Soiled utility rooms shall contain a handwashing fixture, work counter, waste receptacles and linen hampers unless the room is used only for the temporary holding of soiled materials, in which case the handwashing fixture and work counter may be omitted per Section 420A.14.10.
- A27) Utility rooms shall be designed for the separation of clean and soiled areas and provide not less than 100 square feet (9.3 m<sup>2</sup>). Alternatively, separate clean and soiled utility rooms of not less than 50 square feet (4.7 m<sup>2</sup>) each may be provided. Additional square footage accommodating Section 420A.23.2 shall be provided if utility rooms also include linen and supply storage space per Section 420A.14.10.1.
- A28) Minimum aisle widths in utility rooms shall be 4 feet (1219 mm) per Section 420A.14.10.2.
- A29) A method of assuring visual privacy for each patient shall be provided in patient rooms and in tub, shower, and toilet rooms per Section 420A.14.11.
- A30) Each toilet, bathtub and shower serving patients shall be provided with conveniently located grab bars per Section 420A.14.13.1.
- A31) A minimum of one bathtub on each floor providing skilled nursing or intermediate-care services per Section 420A.14.13.2.
- A32) Radiation Shielding Calculations shall be provided for all rooms containing radiation machines, per Section 420A.18. The enclosed Certification for Radiation Protection form shall be completed, signed, and returned to this Office.

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- A33) Hospitals shall provide general storage space of at least 20 square feet (1.9 m<sup>2</sup>) per bed in addition to specialized storage spaces. All storage spaces shall be readily accessible on the site of the facility per Section 420A.23.1.
- A34) Separate and enclosed facilities for clean and soiled linen in each nursing unit. The clean linen storage space shall have a minimum area of 10 square feet (0.929 m<sup>2</sup>) and may be within the clean utility room. The soiled linen collection space shall have an area of no less than 10 square feet (0.929 m<sup>2</sup>), except where linen chutes are provided, and may be within the soiled utility room per Section 420A.23.2.1.
- A35) One supply storage space having a minimum area of 15 square feet (1.4 m<sup>2</sup>) shall be provided in each nursing unit. Supply storage may be within the clean utility room used only as part of a system for distributing clean and sterile supplies per Section 420A.23.2.2.
- A36) A room or space shall be provided in each nursing unit for wheelchairs and stretchers. The wheelchair and stretcher space shall have a minimum area of 15 square feet (1.4 m<sup>2</sup>) per Section 420A.23.2.3.
- A37) Separate dressing rooms for male and female personnel with lockers, lavatory and toilet shall be provided per Section 420A.25.1.
- A38) ICU shall be designed so that all beds shall be placed in relation to the nurses' station or work area to permit, enable or allow maximum observation of patients per Section 420A.36.
- A39) Bed spaces shall provide at least 132 square feet (12.3 m<sup>2</sup>) with no dimension less than 11 feet (3353 mm), with 4 feet (1219 mm) of clearance at each side and the foot of the bed, and with a minimum of 8 feet (2438 mm) between beds per Section 420A.36.
- A40) A labor/delivery/recovery room shall provide not less than 234 square feet (21.7 m<sup>2</sup>) of usable floor area with no dimension less than 13 feet (3962 mm), in addition to spaces used for equipment storage and toilet room per Section 420A.42.3.
- A41) If an occupational therapy service space is provided, the following shall be accommodated per Section 420.39:
1. A minimum floor area of 300 square feet (27.9 m<sup>2</sup>), no dimension of which shall be less than 12 feet (3658 mm).



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2. An office space separate from the treatment area.
  3. Handwashing fixture.
- A42) Each examination and treatment room shall be equipped with handwashing fixtures per Section 420A.40.1.3.
- A43) If a physical therapy service is provided, the minimum floor area for a physical therapy treatment space shall be 300 square feet (27.9 m<sup>2</sup>), no dimension of which shall be less than 12 feet (3658 mm). In addition, the following shall be provided per Section 420A.43.
1. An office space separate from the treatment area.
  2. Public toilets and waiting area located within or adjacent to the physical therapy service space if outpatients are served.
  3. A minimum of one handwashing fixture in the treatment area.
- A44) Glazing in fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within a 24-inch (610 mm) arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches (1525 mm) above the walking surface shall be safety glazing, per Section 2406.4.6.
- A45) Glazing in fixed or operable panels other than those covered by 2406.4.5 and 2406.4.6 which have a glazed area in excess of 9 square feet and the lowest edge is less than 18 inches above the finished floor level or walking surface within 36 inches of such glazing shall be glazed with safety glazing, per Section 2406.4.7.
- A46) Unenclosed floor and roof openings, open and glazed sides of stairways, landings and ramps, balconies or porches, which are more than 30 inches (762 mm) above grade or floor below, and roofs used for other than service of the building shall be protected by a guardrail, per Section 509.1.
- A47) Stud walls or partitions around shower or toilet rooms with more than two fixtures, and stud walls adjacent to unroofed paved areas, shall rest on concrete curbs extending at least 6 inches (152 mm) above finished floor or paving level, per Section 2317B.4.1.

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A48) Bottoms of sills on exterior foundation walls shall be not less than 12 inches (305 mm) above outside finished earth grade. On exterior walls where the earth is paved with an asphalt or concrete slab at least 18 inches (457 mm) wide and draining away from the building, the bottom of sills may be 6 inches (152 mm) above top of such slab. Other means of termite and decay protection may be accepted by the enforcement agency, per Section 2317B.4.1.

A49) Skilled nursing facilities and intermediate care facilities shall provide combined general and specialized storage in accordance with the following schedule, per Section 421A.10.1:

### **Licensed Bed Capacity**

1 to 10 beds  
11 to 100 beds  
Over 100 beds

### **Storage Area**

120 square feet (11.2 m<sup>2</sup>) minimum  
12 square feet (1.1 m<sup>2</sup>) per bed.  
1,200 square feet (111.5 m<sup>2</sup>) plus 5  
square feet (0.47 m<sup>2</sup>) per bed for each  
bed over 100

A50) The following shall be provided for Physical Therapy Service, per Section 421A.15:

1. The minimum floor area for physical therapy service shall be 300 square feet (27.9 m<sup>2</sup>), with no dimension less than 12 feet (3658 mm), per Section 421A.15.1.
2. Toilet facilities shall be directly accessible and allow for patient transfer activities, per Section 421A.15.2.
3. Equipment Space. See Title 22 for required equipment, per Section 421A.15.3.
4. A minimum of one handwashing fixture, per Section 421A.15.4.

D1) Entrance. At least one accessible entrance shall be protected from the weather by canopy or roof overhang. Such entrances shall incorporate a passenger loading zone. Passenger loading zones shall provide an access aisle at least 60 inches (1524 mm) wide and 20 feet (6096 mm) long adjacent and parallel to the vehicle pull-up space. If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with Chapter 11B shall be provided. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1 unit vertical in 50 units horizontal (2% slope) in all directions. Minimum vertical clearance of 114 inches (2896 mm) at accessible passenger loading zones and along vehicle access routes to such areas from site entrances shall be provided, per Section 1109B.2.

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EXCEPTION: Clinics and other medical facilities that are not intended for patient stays of 24 hours or more, and that are located above the first story of a building, and that do not have a dedicated entrance from the exterior of the building at the first story.

- D2) Long-term care facilities, including skilled nursing facilities, intermediate care facilities, bed and care, and nursing homes shall have at least 50 percent of patient bedrooms and toilet rooms, and all public-use and common-use areas, accessible, per Section 1109B.3.1.
- D3) General-purpose hospitals, psychiatric facilities, and detoxification facilities shall have at least 10 percent of patient bedrooms and toilets, and all public-use and common-use areas, accessible, per Section 1109B.3.2.
- D4) Hospitals and rehabilitation facilities that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, shall have all patient bedrooms and toilets and all public-use and common-use areas accessible, per Section 1109B.3.3.
- D5) Accessible patient bedrooms shall comply with the following requirements, per Section 1109B.4.
  - 1. Each bedroom shall have a turning space measuring 60 inches (1524 mm) clear in diameter, or that is a T-shaped space complying with Figure 11B-12. In rooms with two beds, it is preferable that this space be located between beds.
  - 2. Each bedroom shall have a minimum clear floor space of 36 inches (914 mm) along each side of the bed, and shall provide an accessible route to each side of the bed.
  - 3. Each bedroom shall have an accessible door that complies with Section 1133B.2.
- D6) Diagnostic and treatment areas and, where applicable, at least one dressing room, sanitary facility, etc., for each unit or suite, shall be made accessible, per Section 1109B.6.
- D7) All existing buildings and facilities, when alterations, structural repairs or additions are made to such buildings or facilities, shall comply with all provisions of Division I, New Buildings, except as modified by Division IV. These requirements shall apply only to the area of specific alteration, structural repair or addition and shall include those additional areas and facilities listed below, per Section 1134B.2.

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A primary entrance to the building or facility and the primary path of travel to the specific area of alteration, structural repair or addition, and sanitary facilities, drinking fountains and public telephones serving the area. See Section 1134B.2.1 for exceptions.

- D8) All doorways leading to sanitary facilities shall have a clear unobstructed opening width of 32 inches (813 mm), per Section 1115B.4.1.
- D9) All passageways leading to sanitary facilities shall have a level and clear area for a minimum depth of 60 inches (1524 mm) in the direction of the door swing as measured at right angles to the plane of the door in its closed position, and 44 inches (1118 mm) where the door swings away from the level and clear area. The width of the level area on the side to which the door swings shall extend 24 inches (610 mm) past the strike edge of the door for exterior doors and 18 inches (457 mm) past the strike edge for interior doors, per Section 1115B.4.2.
- D10) Doorways leading to men's sanitary facilities shall be identified with an equilateral triangle 1/4 inch thick (6.4 mm) with edges 12 inches (305 mm) long and a vertex pointing upward. Women's sanitary facilities shall be identified by a circle, 1/4 inch thick (6.4 mm) and 12 inches (305 mm) in diameter. Unisex sanitary facilities shall be identified by a circle 1/4 inch thick (6.4 mm), 12 inches (305 mm) in diameter with a 1/4 inch thick (6.4 mm) triangle superimposed on the circle and within the 12 inch (305 mm) diameter. These geometric symbols shall be centered on the door at a height of 60 inches (1524 mm) and their color and contrast shall be distinctly different from the color and contrast of the door, per Section 1115B.5.
- D11) Multiple-accommodation toilet facilities shall provide a clear space measured from the floor to a height of 27 inches (686 mm) above the floor, within the sanitary facility room, of sufficient size to inscribe a circle with a diameter not less than 60 inches (1524 mm), or a clear space 56 inches by 63 inches (1422 mm by 1600 mm) in size. Doors per Section 1115B.7.1.1 other than the door to the accessible water closet compartment in any position may encroach into this space by not more than 12 inches (305 mm) other than the door to the handicapped/physically disabled toilet compartment on any position may encroach into this space by not more than 12 inches (305 mm).
- D12) A water closet fixture located in a compartment shall provide a minimum 28 inch-wide (711 mm) clear space from a fixture or a minimum 32 inch-wide (813 mm) clear space from a wall at one side of the water closet. The other side of the water closet shall provide 18 inches (457 mm) from the centerline of the water closet to the wall. A minimum 48-inch-long (1219 mm) clear space shall be provided in front of the water closet if the compartment has an end-opening door (facing the water closet). A minimum 60 inch-long (1524 mm) clear space shall be provided in a compartment

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with the door located at the side. Grab bars shall not project more than 3 inches (76 mm) into the clear spaces as specified above, per Section 1115B.7.1.2.

- D13) The handicapped accessible water closet compartment shall be equipped with a door that has an automatic-closing device, and shall have a clear, unobstructed opening width of 32 inches (813 mm) when located at the end and 34 inches (864 mm) when located at the side with the door positioned at an angle of 90 degrees from its closed position. When standard compartment doors are used, with a minimum 9-inch (229 mm) clearance for foot rests underneath and a self-closing device, clearance at the strike edge as specified in Section 1133B.2.4.3 is not required.

The inside and outside of the compartment door shall be equipped with a loop or U-shaped handle immediately below the latch. The latch shall be flip-over style, sliding, or other hardware not requiring the user to grasp or twist. Except for door-opening widths and door swings, a clear, unobstructed access not less than 44 inches (1118 mm) shall be provided to water closet compartments designed for use by persons with disabilities and the space immediately in front of a water closet compartment shall not be less than 48 inches (1219 mm) as measured at right angles to compartment door in its closed position, per Section 1115B.7.1.4.

- D14) Single-accommodation toilet facilities. There shall be sufficient space in the toilet room for a wheelchair measuring 30 inches (762 mm) wide by 48 inches (1219 mm) long to enter the room and permit the door to close. There shall be in the room a clear floor space of at least 60 inches (1524 mm) in diameter, or a T-shaped space complying with Figure 11B-12(a) and (b). No door shall encroach into this space. The water closet shall be located in a space which provides a minimum 28-inch-wide (711 mm) clear space from a fixture or a minimum 32-inch-wide (813 mm) clear space from a wall at one side. The other side shall provide 18 inches (457 mm) from the centerline of the water closet to the wall. A minimum 48 inches (1219 mm) of clear space shall be provided in front of the water closet. All doors, fixtures and controls shall be on an accessible route. The minimum clear width of an accessible route shall be 36 inches (914 mm) except at doors (see Section 1133B.2). If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in Figure 11B-5E, per Section 1115B.7.2.

- D15) Grab bars located on each side, or one side and the back of the accessible toilet stall or compartment, shall be securely attached 33 inches (838 mm) above and parallel to the floor, except that where a tank-type toilet is used which obstructs placement at 33 inches (838 mm), the grab bar may be as high as 36 inches (914 mm). Grab bars shall be at least 42 inches (1067 mm) long with the front end positioned 24 inches (610 mm) in front of the water closet stool. Grab bars at

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the back shall be not be less than 36 inches (914 mm) long. See Figures 11B-1A, 11B-1B and 11B-1C, per Section 1115B.8.1.

- D16) The diameter or width of the gripping surfaces of a grab bar shall be 1 1/4 inches to 1 2 inches (32 mm to 38 mm) or the shape shall provide an equivalent gripping surface. If grab bars are mounted adjacent to a wall, the space between the wall and the grab bars shall be 1 2 inches (38 mm). See Figure 11B-1C, per Section 1115B.8.2.
- D17) Where facilities for bathing are provided for the public, clients or employees, including showers, bathtubs or lockers, at least one such facility, and not less than 1 percent of all facilities, shall conform to the following standards unless specifically exempted by other portions of these regulations, per Section 1115B.6.
- D18) Showers shall be 60 inches (1524 mm) minimum in width between wall surfaces and 30 inches (762 mm) minimum in depth with a full opening width on the long side, or 42 inches (1067 mm) in width between wall surfaces and 48 inches (1219 mm) minimum in depth with an entrance opening of 42 inches (1067 mm). As an alternative, showers 60 inches (1524 mm) minimum in width may be 36 inches (914 mm) minimum in depth as long as the entrance opening width is a minimum 36 inches (914 mm) per Section 1115B.6.2.1.
- D19) When a threshold or recessed drop is used at a compartment shower, it shall be a maximum of 2 inch (13 mm) in height and shall be beveled or sloped at an angle not exceeding 45 degrees (100 percent gradient) from the horizontal, per Section 1115B.6.2.2.
- D20) Where, within the same functional area, two or more accessible showers are provided, there shall be at least one shower constructed opposite hand from the other or others (i.e., one left-hand controls versus right-hand control(s) per Section 1115B.6.2.3.
- D21) A folding seat located within 27 inches (686 mm) of the controls mounted 18 inches (457 mm) above the floor, and with a minimum space of 1 inch (25 mm) and maximum space of 1 1/2 inches (38 mm) allowed between the edge of the seat and any wall. When folded, the seat shall not extend more than 6 inches (152 mm) from the mounting wall. See Figures 11B-2A, 11B-2B, 11B-2C and 11B-2D per Section 1115B.6.2.4.5.

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- D22) Grab bars located on walls adjacent to and opposite the seat. Grab bars also comply with the diameter, loading and projection requirements of Sections 1115B.8.2, 1115B.8.3 and 1115B.8.4. Grab bars shall be mounted between a minimum of 33 inches (838 mm) and a maximum of 36 inches (914 mm) above the shower floor with an L-shaped grab bar mounted on walls opposite and adjacent to the front edge of the seat, but not extended to include that portion of wall over the seat. See Figure 11B-2A or 11B-2B. Section 1115B.6.2.4.5.
- D23) When a soap dish is provided it shall be located on the control wall at a maximum height of 40 inches (1016 mm) above the shower floor and within reach limits from the seat, per Section 1115B.6.2.4.3.
- D24) Where lockers are provided for public, clients, employees, members or participants, at least one locker and not less than 1 percent of all lockers shall be made accessible to persons with disabilities. A path of travel not less than 36 inches (914 mm) in clear width shall be provided to these lockers, per Section 1115B.6.4.
- D25) In other than dwelling units, toilet room floors shall have a smooth, hard, nonabsorbent surface such as portland cement, concrete, ceramic tile or other approved material which extends upward onto the walls at least 5 inches (127 mm). Walls within water closet compartments and walls within 24 inches (610 mm) of the front and sides of urinals shall be similarly finished to a height of 48 inches (1219 mm) and, except for structural elements, the materials used in such walls shall be of a type which is not adversely affected by moisture, per Section 1115B.9.5.
- D26) A clear floor space 30 inches by 48 inches (762 mm by 1219 mm) complying with Section 1118B.4, shall be provided in front of a lavatory to allow a forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend into knee and toe space underneath the lavatory, per Section 1115B.9.1.1.
- D27) Mirrors shall be mounted with the bottom edge no higher than 40 inches (1016 mm) from the floor, per Section 1115B.9.1.2.
- D28) Where towel, sanitary napkins, waste receptacles, and other similar dispensing and disposal fixtures are provided, at least one of each type shall be located with all operable parts, including coin slots, within 40 inches (1016 mm) from the finished floor, per Section 1115B.9.2.
- D29) Toilet tissue dispensers shall be located on the wall within 12 inches (305 mm) of the front edge of the toilet seat. Dispensers that control delivery or that do not permit continuous paper flow shall not be used, per Section 1115B.9.3. See Figure 11B-1A.

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- D30) Where urinals are provided, at least one shall have a clear floor space 30 inches by 48 inches (762 mm by 1219 mm) in front of the urinal to allow forward approach. This clear space shall comply with Section 1118B.4, per Section 1115B.9.4.
- D32) Water fountains shall be located completely within alcoves or otherwise positioned so as not to encroach into pedestrian ways. The alcove in which the water fountain is located shall not be less than 32 inches (813 mm) in width and 18 inches (457 mm) in depth, per Section 1117B.1.2. See Figure 11B-3 of this code.
- D33) If public telephones are provided, they shall comply with Section 1117B.2.1. See Figure 11B-4.
- D34) Hand-activated door opening hardware shall be centered between 30 inches (762 mm) and 44 inches (1118 mm) above the floor. Latching and locking doors that are hand-activated and which are in a path of travel shall be operable with a single effort by lever-type hardware, panic bars, push-pull activating bars, or other hardware designed to provide passage without requiring the ability to grasp the opening hardware. Locked exit doors shall operate as above in egress direction. Doors to individual hotel or motel units shall operate similarly, except that when bolt and unlatching operation is key operated from corridor or exterior side of unit door, large bow keys 2 inches (51 mm) (full bow) or 1 1/4 inches (32 mm) (half bow) shall be provided in lieu of lever-type hardware on the corridor side. Separate dead lock activation on room side of corridor doors in hotels or motels shall have lever handle or large thumb turn on an easily reached location., per Section 1133B.2.5.1.
- D35) The floor or landing shall not be more than 2 inch (13 mm) lower than the threshold of the doorway. Change in level between 1/4 inch (6.4 mm) and 2 inch (13 mm) shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50% slope). Change in level greater than 2 inch (13 mm) shall be accomplished by means of a ramp, per Section 1133B.2.4.1.
- D36) Minimum maneuvering clearances at doors shall be as shown in Figure 11B-26A and 11B-26B. The floor or ground area within the required clearances shall be level and clear.

The level area shall have a length in the direction of door swing of at least 60 inches (1524 mm) and the length opposite the direction of door swing of 48 inches (1219 mm) as measured at right angles to the plane of the door in its closed position, per Section 1133B.2.4.2.



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- D37) The width of level area on the side to which the door swings shall extend 24 inches (610 mm) past the strike edge of the door for exterior doors and 18 inches (457 mm) past the strike edge for interior doors, per Section 1133B.2.4.3.
- D38) Maximum effort to operate doors shall not exceed 8 2 pounds (38 N) for exterior doors and 5 pounds (22 N) for interior doors, such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be utilized to meet the above standards. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate administrative authority, not to exceed 15 pounds (66.72 N), per Section 1133B.2.5.1.
- D39) The bottom 10 inches (254 mm) of all doors except automatic and sliding shall have a smooth, uninterrupted surface to allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition. Where narrow frame doors are used, a 10-inch-high (254 mm) smooth panel shall be installed on the push side of the door, which will allow the door to be opened by a wheelchair footrest without creating a trap or hazardous condition, per Section 1133B.2.6.
- D40) The clear width of means of egress components serving areas occupied or used by bed or litter patients shall be such that it will allow ready passage of such equipment, but shall not be less than 44 inches (1118 mm). Other aisles shall have a clear width of not less than 32 inches (813 mm) per Section 1007.5.1.
- D41) In buildings two or more stories in height, served by an elevator, or a building served by an elevator required by Chapter 11, or a building served by an elevator required for accessibility by Section 101.17, all elevators provided shall accommodate a wheelchair, per Section 3003.4.1a.
- D42) Handrails shall be 34 to 38 inches (864 to 965 mm) above the nosing of the treads, per Section 1133B.4.2.1.
- D43) Handrails shall extend a minimum of 12 inches (305 mm) beyond the top nosing and 12 inches (305 mm), plus the tread width, beyond the bottom nosing, per Section 1133B.4.2.2.
- D44) The upper approach and the lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2 inches (51 mm) wide placed parallel to and close to [not more than 1 inch (25 mm) from] the nose of the step or landing to alert the visually impaired. The strip shall be of material that is at least as slip resistant as the other treads of the stair, per Section 1133B.4.4.

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- D45) Where stairways occur outside a building, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least 2 inches (51 mm) wide and placed parallel to and not more than 1 inch (25 mm) from the nose of the step or landing to alert the visually impaired. The strip shall be of a material that is at least as slip resistant as the other treads of the stair. A painted strip shall be acceptable, per Section 1133B.4.4.
- D46) Handrails are required on ramps that provide access if slope exceeds 1 foot rise in 20 feet of horizontal run (5% slope) except that at exterior door landings, handrails are not required on ramps less than 6" (752 mm) rise or 72 inches (1829 mm) in length. Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34 to 38 inches (864 to 965 mm) above the ramp surface, shall extend a minimum of 1 foot (305 mm) beyond the top and bottom of the ramp, and the ends shall be returned. Handrails projecting from a wall shall have a space of not less than 1 2 inches (38 mm) between the wall and the handrail. Handrails may be located in a recess if the recess is a maximum of 3 inches (76 mm) deep and extends at least 18 inches (457 mm) above the top of the rail. The grip portion shall not be less than 1 1/4 inches (32 mm) nor more than 1 2 inches (38 mm), or the shape shall provide an equivalent gripping surface and all surfaces shall be smooth with no sharp corners. Handrails shall not rotate within their fittings. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch (3.2 mm). Handrails must resist 250 pounds (113.5 kg) in any direction, per Section 1133B.5.5.
- D47) Ends of handrails shall be returned or shall terminate in newel posts or safety terminals, per Section 1133B.4.2.3.
- D48) Site development and grading shall be designed to provide access to all entrances and exterior ground-floor exits, and access to normal paths of travel, and where necessary to provide access, shall incorporate pedestrian ramps, curb ramps, etc. When more than one building or facility is located on a site, accessible routes of travel shall be provided between buildings and accessible site facilities. The accessible route of travel shall be the most practical direct route between accessible building entrances, accessible site facilities and the accessible entrance to the site, per Section 1127B.1.
- D49) In each parking area, a bumper or curb shall be provided and located to prevent encroachment of cars over the required width of walkways. Also, the space shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own. Pedestrian ways which are accessible to people with disabilities shall be provided from each such parking space to related facilities, including curb cuts or ramps as needed. Ramps shall not encroach into any parking space, per Section 1129B.4.3.

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- D50) Surface slopes of accessible parking spaces shall be the minimum possible and shall not exceed 1 unit vertical to 50 units horizontal (2% slope) in any direction, per Section 1129B.4.4.
- D51) Each parking space reserved for persons with physical disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space, consisting of a profile view of a wheelchair with occupant in white on dark blue background. The sign shall not be smaller than 70 square inches (4516 mm<sup>2</sup>) in area and, when in a path of travel, shall be posted at a minimum height of 80 inches (2032 mm) from the bottom of the sign to the parking space finished grade and shall be unobscured by a parked vehicle. Signs may also be centered on the wall at the interior end of the parking space at a minimum height of 36 inches (914 mm) from the parking space finished grade, ground or sidewalk. Spaces complying with Section 1129B.4.2 shall have an additional sign stating "Van-Accessible" mounted below the symbol of accessibility, per Section 1129B.5.
- D52) An additional sign shall also be posted in a conspicuous place at each entrance to off-street parking facilities, or immediately adjacent to and visible from each stall or space. The sign shall not be less than 17 inches by 22 inches (432 mm by 559 mm) in size with lettering not less than 1 inch (25 mm) in height, which clearly and conspicuously states the following, per Section 1129B.5.

"Unauthorized vehicles parked in designated accessible spaces not displaying distinguishing placards or license plates issued for persons with disabilities may be towed away at owner's expense. Towed vehicles may be reclaimed at \_\_\_\_\_ or by telephoning \_\_\_\_\_."

Blank spaces are to be filled in with appropriate information as a permanent part of the sign.

- D53) In addition to the above requirements, the surface of each accessible parking space or stall shall have a surface identification duplicating either of the following schemes, per Section 1129B.5.
1. By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a profile view depicting a wheelchair with occupant; or
  2. By outlining a profile view of a wheelchair with occupant in white on blue background. The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36 inches high by 36 inches wide (914 mm by 914 mm). See Figures 11B-18A through 11B-18C.

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- P1) The height of accessible water closets shall be a minimum of 17 inches (432 mm) and a maximum of 19 inches measured to the top of a maximum 2-inch-high (51 mm) toilet seat except that 3-inch (76 mm) seats shall be permitted only in alterations where the existing fixture is less than 15 inches (381 mm) high, per Section 1502, Part 5, Title 24.
- P2) Controls shall be operable with one hand, and shall not require tight grasping, pinching, or twisting. Controls for the flush valves shall be mounted on the wide side of toilet areas, no more than 44 inches above the floor. The force required to activate controls shall be no greater than 5 pound-force (1bf) (22.2 N), per Section 1502.0, Part 5, Title 24.
- P3) Lavatories adjacent to a wall shall be mounted with a minimum distance of 18 inches (457 mm) to the center line of the fixture. All accessible lavatories shall be mounted with the rim or counter surface no higher than 34 inches (864 mm) above the finished floor and with a clearance of at least 29 inches (737 mm) from the floor to the bottom of the apron with knee clearance under the front lip extending a minimum of 30 inches (762 mm) in width with 8 inches (203 mm) minimum depth at the top. The clearance shall be the same width and shall be a minimum of 9 inches (229 mm) high from the floor and a minimum of 17 inches (432 mm) deep from the front of the lavatory, per Section 1504.1.1, Part 5, Title 24.
- P4) Hot water and drain pipes under lavatories shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories, per Section 1504.1.2, Part 5, Title 24.
- P5) Faucet controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
- The force required to activate controls shall be no greater than 5 lbf (22.2 N). Lever operated, push-type, and electronically controlled mechanisms are examples of acceptable designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds, per Section 1504.1.3, Part 5, Title 24.
- P6) Water controls of a single lever design shall be located on the side wall opposite the seat and operable with a maximum force of 5 lbs. The controls shall be located 40 inches above the shower floor, per Section 1505.1, Part 5, Title 24.

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- P7) A flexible hand-held shower unit with a hose at least 60 inches (1524 mm) long shall be provided with head mounting height of 48 inches (1219 mm) [plus or minus 1 inch (25 mm) tolerance] maximum above the shower floor, per Section 1505.2, Part 5, Title 24.
- P8) Where handicapped shower facilities are provided in areas subject to excessive vandalism, in lieu of providing a fixed flexible hose and a hand-held shower head required above, two wall-mounted shower heads shall be installed. Each shower head shall be controlled so that it can be operated independently of the other and shall have swivel angle adjustment, both vertically and horizontally. One shower head shall be located at a height of 40 inches (1016 mm) [plus or minus 1 inch (25 mm) tolerance] above the floor, per Section 1505.3, Part 5, Title 24.
- P9) Where, within the same functional area, two or more showers are provided for the physically handicapped, there shall be at least one shower constructed opposite hand from the other or others (i.e., one left-hand controls versus right-hand controls), per Section 1505.4, Part 5, Title 24.
- P10) Bathtubs shall be provided with a shower spray unit having a hose at least 60 inches (1524 mm) long that can be used as a shower. Bathtub enclosures, if provided, shall not obstruct controls or transfer from wheelchair onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims, per Section 1506.0, Part 5, Title 24.
- P11) All shower compartments, regardless of shape, shall have a minimum finished interior of one thousand twenty-four (1024) square inches (0.66 m<sup>2</sup>) and shall also be capable of encompassing a thirty (30) inch (0.76 m) circle. The minimum required area and dimensions shall be measured at a height equal to the top of the threshold and at a point tangent to its centerline. The minimum area and dimensions shall be maintained to a point seventy (70) inches (1.8 m) above the shower drain outlet with no protrusions other than the fixture valve or valves, shower head and safety grab bars or rails, per Section 412.7, Part 5, Title 24.
- P12) The drinking fountain shall be a minimum of 18 inches (457 mm) in depth and there shall be clear and unobstructed knee space under the drinking fountain not less than 27 inches (686 mm) in height and 8 inches (203 mm) in depth, the depth measurements being taken from the front edge of the fountain. Additionally, there shall be toe clearance of 9 inches (229 mm) in height above the floor and 17 inches (432 mm) in depth from the front edge of fountain. A side approach drinking fountain is not acceptable, per Section 1507.3.1, Part 5, Title 24.
- P13) The bubbler shall be activated by a manually operated system not requiring a force greater than 51 bf (22 N) that is located within 6 inches (152 mm) of the front of the fountain, a push bar control along the front of the drinking fountain, etc. The bubbler outlet orifice shall be located within 6

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inches (152 mm) of the front of the drinking fountain and shall be within 36 inches (914 mm) of the floor. The water stream from the bubbler shall be substantially parallel to the front edge of the drinking fountain, per Section 1507.2, Part 5, Title 24.